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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,296	07/18/2003	W. Keith Edwards	PARC-DA3285	4686

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PVF -- PARC
c/o PARK, VAUGHAN & FLEMING LLP
2820 FIFTH STREET
DAVIS, CA 95618-7759

EXAMINER

DAVIS, ZACHARY A

ART UNIT	PAPER NUMBER
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2137

MAIL DATE	DELIVERY MODE
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10/02/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/623,296	Applicant(s) EDWARDS ET AL.	
	Examiner Zachary A. Davis	Art Unit 2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,7-16,18-27 and 29-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,7-16,18-27 and 29-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 14 March 2007 has been entered. However, as detailed in the Notice of Non-Compliant Amendment mailed 17 July 2007, this reply did not fully comply with the provisions of 37 CFR 1.121. A further response was received on 23 July 2007.
2. By the above response, Claims 1, 12, 23 have been amended. No claims have been added or canceled. Claims 1-5, 7-16, 18-27, and 29-33 are currently pending in the present application.

Response to Arguments

3. Applicant's arguments with respect to claims 1-5, 7-16, 18-27, and 29-33 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-5, 7, 8, 10, 12-16, 18, 19, 21, 23-27, 29, 30, and 32 are rejected under 35 U.S.C. 102(e) as being anticipated by Nakagawa et al, US Patent 6530025.

In reference to Claim 1, Nakagawa discloses a system that includes a controller module including instructions for controlling a first component, where the controller module is provided dynamically (see Figure 4, relay agent 401; see also column 4, lines 47-58; column 5, lines 5-8; and column 7, lines 29-43); and a second component with a security system that interacts with the controller module to implement a security protocol before the second component can control the first component by executing the controller module (column 7, lines 57-64), where the controller provides secure control of communications between the first and second components (column 7, lines 49-64, where communications are encrypted), the security system decrypts an encrypted controller module (column 7, lines 61-63), and the second component controls the first component using the instructions in the controller module without having prior

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knowledge of the first component (column 8, lines 1-8; see also column 4, lines 10-12, where the user may be an external, unregistered user).

In reference to Claim 2, Nakagawa further discloses authentication instructions which cause the second component to send authentication information to the first component (column 3, lines 48-54).

In reference to Claim 3, Nakagawa further discloses that the authentication information is associated with an operator of the second component and the first component authenticates the operator using the authentication information (column 3, line 52; column 4, lines 17-20).

In reference to Claims 4 and 5, Nakagawa further discloses authenticating the second component using the authentication information (column 3, lines 48-54) or authenticating messages associated with controlling the first component (column 8, lines 34-52), and that messages associated with controlling the first component are rejected upon unsuccessful authentication and accepted upon successful authentication (column 8, lines 13-63).

In reference to Claim 7, Nakagawa further discloses using a cryptographic key associated with the second component to decrypt the encrypted module (column 7, lines 57-64).

In reference to Claim 8, Nakagawa further discloses authenticating the controller module using a public key (column 7, lines 49-64).

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In reference to Claim 10, Nakagawa further discloses that the controller module is encrypted using a cryptographic key from the second component (column 7, lines 49-56).

Claims 12-16, 18, 19, and 21 are directed to methods that correspond substantially to the systems of Claims 1-5, 7, 8, and 10, and therefore are rejected by a similar rationale.

Similarly, Claims 23-27, 29, 30, and 32 are directed to software implementations of the methods of Claims 12-16, 18, 19, and 21 and correspond substantially to the systems of Claims 1-5, 7, 8, and 10, and therefore are also rejected by a similar rationale.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 9, 11, 20, 22, 31, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakagawa.

In reference to Claims 9 and 11, Nakagawa discloses everything as applied to Claim 1 above. Similarly in reference to Claims 20 and 22, Nakagawa discloses

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everything as applied to Claim 12 above, and in reference to Claims 31 and 33, Nakagawa discloses everything as applied to Claim 23 above. However, Nakagawa does not explicitly disclose the use of cryptographic signatures.

Official notice is taken that the use of cryptographic signatures would have been well known to one of ordinary skill in the art at the time the invention was made. In particular, the use of verification of digital signatures and rejecting data having a signature that does not verify correctly would have been well known to have the purpose of protecting the integrity of data and verifying that the data came from a specific source and was not modified since its signing. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the systems, methods, and software of Nakagawa by including the use of cryptographic signatures of the transmitted controller module, because it would have yielded the predictable and desirable result of allowing verification of the integrity of the transmitted module.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Wang, US Patent 6907530, discloses a system that includes a mobile code authentication and encryption client.

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- b. Shear et al, US Patent 7120802, discloses methods that include encrypting and authenticating load modules and strictly controlling the execution of load modules using encryption keys or signatures.
- c. Ginter et al, US Patent 7133845, discloses a system that includes storing program modules in memory in encrypted form except when being executed.
- d. Lordemann et al, US Patent Application Publication 2002/0032873, discloses a method that combines and encrypts requested objects (such as program files) with mobile code that performs authentication.
- e. Mas Ribes, European Patent Application EP 1132796, discloses a method in which mobile program code has an encrypted authentication certificate.
- f. Chess, "Security Issues in Mobile Code Systems", generally describes security hazards raised by the use of mobile code and potential solutions to those issues.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zachary A. Davis whose telephone number is (571) 272-3870. The examiner can normally be reached on weekdays 8:30-6:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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